

REMARKS

Claims 1-10 remain in the application, with claims 1 and 6 having been amended hereby.

The claims have been carefully reviewed and amended with particular attention to the points raised in the Office Action. It is submitted that no new matter has been added and no new issues have been raised by the present response.

Reconsideration is respectfully requested of the rejection of claim 1 under 35 U.S.C. § 102(e), as allegedly being anticipated by U.S. Patent No. 6,519,656 (Kondo et al.).

Applicants have carefully considered the comments of the Office Action and the cited reference, and respectfully submit that claim 1 is patentably distinct over the cited reference for at least the following reasons.

The present invention relates to a transmitting method and apparatus. Data are transmitted in a predetermined format with units having a predetermined data length among devices linked to a bus line by setting up a section for transmitting auxiliary data of transmission data in a unit having the predetermined data length. Identification data related to spatial placement of the transmission data are placed in a first section within the section for transmitting the auxiliary data, and data related to set-up of the transmission data are placed in a second section within the transmitting section.

Kondo et al., as understood by Applicants, relates to a method for data transmission with a list of auxiliary

information by appending corresponding ID codes with respective auxiliary information. A list generator produces a list of auxiliary information by appending a corresponding ID code to each item of the auxiliary information based on a table of ID codes previously assigned to the items of the auxiliary information, to access desired auxiliary information content in the list with reference to the ID code.

The Office Action states that Kondo et al. discloses, inter alia, a method of data transmission including setting up an auxiliary section, placing identification data related to spatial placement of the transmission data in a first section within the auxiliary section and placing data related to a set-up of the transmission data in a second section (see Office Action, p. 3, lns. 2-6). Applicants respectfully disagree.

The Office Action cites col. 2, lns. 6-25 of Kondo et al. as allegedly disclosing the above-identified elements. The cited section of Kondo et al. reads "FIG. 9 shows a structure of an AV/C command frame which is up to 512 bytes of command payload. The AV/C commands and responses are encapsulated within FCP frames and are transmitted between the controller and target FCP_COMMAND and FCP_RESPONSE registers. In this command frame structure, a "ctype" 1 field is defined for indicating a command type as to whether the command is a control one or an inquiring one. The subunit_type and subunit_ID fields are defined for identifying a type of an AV equipment and the subsequent opcode and operands [0] to [n]

indicate an actual command such as PLAY, STOP, RECORD and the like. All of the operands are optional and defined by ctype, subunit_type and opcode. In the case where a compact disk or mini disk is used as a data recording medium in a disk drive unit for recording and reproducing substantive data such as, for example, audio (and/or video) data, the disk is also provided with auxiliary attributive information as well as the substantive audio (and/or video) data recorded thereon."

As understood by Applicants, the above-quoted section of Kondo et al. relates to an AV/C command frame that is located within a function control protocol (FCP) frame and that is transmitted between the controller and target registers. The command frame structure includes fields for indicating a command type and for identifying a type of AV equipment, along with operands for indicating actual commands such as PLAY, STOP, etc.

Auxiliary attributive information including a start address of music data, music title, recorded time and date, and the like may also be included (see id., col. 2, lns. 26-39).

As understood by Applicants, however, neither the AV/C command frame nor the auxiliary attributive information described above disclose or suggest identification data related to a spatial placement of the transmission data and data related to the spatial placement of the transmission data for setting up a system including devices for receiving the transmission data.

Furthermore, it is submitted that neither the AV/C command frame nor the auxiliary attributive information of Kondo et al. disclose or suggest placing the identification data in a first section within the auxiliary section and placing data related to the spatial placement of the transmission data in a second section within the auxiliary section.

In contrast, in the present invention identification data related to a spatial placement of the transmission data are placed in a first section within the auxiliary section and placing data related to the spatial placement of the transmission data for setting up a system including devices for receiving the transmission data are placed in a second section within the auxiliary section, as recited in amended independent claim 1.

In an embodiment of the present invention, when one specific kind of data in the auxiliary data is used as the label data, data related to the spatial placement of the multi-channel audio data when transmitting the same is specified (see specification of the present application, p. 22, lns. 14-17).

Referring to Fig. 15 of the present application, a specific kind of data in the auxiliary data label is used as the label data, and the first 8 bits out of the 24 bits following the label data are allocated as the sub-label data that is used as the data specifying the spatial placement (see id., lns. 18-24; Fig. 15).

It is respectfully submitted that neither the cited section nor the remainder of Kondo et al. disclose or suggest a transmitting method for transmitting audio/visual data in a predetermined format using a plurality of units each having a predetermined data length among devices linked to a predetermined bus line, comprising the steps of setting up an auxiliary section for transmitting auxiliary data of transmission data in a unit having the predetermined data length, and placing identification data related to a spatial placement of the transmission data in a first section within the auxiliary section and placing data related to the spatial placement of the transmission data for setting up a system including devices for receiving the transmission data in a second section within the auxiliary section, wherein the predetermined bus line supports real-time data transmission for transmitting the audio/visual data and asynchronous data transmission for transmitting control data, as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited reference.

Withdrawal of the rejection under 35 U.S.C. § 102(e) is respectfully requested.

Reconsideration is respectfully requested of the rejection of claims 2-5 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Kondo et al. in view of U.S. Patent

It is respectfully submitted that neither the cited section nor the remainder of Kondo et al. disclose or suggest a transmitting method for transmitting audio/visual data in a predetermined format using a plurality of units each having a predetermined data length among devices linked to a predetermined bus line, comprising the steps of setting up an auxiliary section for transmitting auxiliary data of transmission data in a unit having the predetermined data length, and placing identification data related to a spatial placement of the transmission data in a first section within the auxiliary section and placing data related to the spatial placement of the transmission data for setting up a system including devices for receiving the transmission data in a second section within the auxiliary section, wherein the predetermined bus line supports real-time data transmission for transmitting the audio/visual data and asynchronous data transmission for transmitting control data, as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited reference.

Withdrawal of the rejection under 35 U.S.C. § 102(e) is respectfully requested.

Reconsideration is respectfully requested of the rejection of claims 2-5 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Kondo et al. in view of U.S. Patent

No. 6,097,558 (Oguro); of the rejection of claim 6 under 35 U.S.C. § 103(a), as allegedly being unpatentable over European Patent Application No. 0 762 684 (Osakabe et al.) in view of Kondo et al.; and of the rejection of claims 7-10 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Osakabe et al. in view of Kondo et al. and further in view of Oguro.

It is submitted that amended independent claim 1 and the claims depending therefrom are patentable over Kondo et al. for at least the reasons set forth above.

Oguro, as understood by Applicants, relates to a digital audio signal transmission apparatus with data blocks of varying sizes, for digitally processing audio signals from a plurality of channels into digitized audio data segmented into blocks in a digital VCR format. Each block reserved for audio data is digitized from one of the channels. The audio data are converted from the channels into the blocks of digitized audio data by varying the data size of the blocks. The audio data are composed by scaling the audio data in at least one of the blocks and combining the scaled audio data with the audio data of another of the blocks into a block reserved for composite audio data.

Osakabe, as understood by Applicants, relates to a data transmission method for digital audio signals. The method enables reduction in the number of terminals for inputting or outputting a real-time digital signal such as a digital audio signal or a musical instrument signal. First and second converters are provided with a mutual conversion function

between a digital audio interface format and an IEEE-1394 format. The method allows transmission of a digital audio interface signal output from a first CD player to the first converter to convert the signal into a packet in IEEE-1394 isochronous transmission format and transmit it to the second converter, return of the packet to the digital audio interface, and recording of a digital audio signal in an MD recorder.

It is respectfully submitted, however, that neither Oguro nor Osakabe, alone or in combination with each other or with Kondo et al., disclose or suggest placing identification data related to a spatial placement of the transmission data in a first section within the auxiliary section and placing data related to the spatial placement of the transmission data for setting up a system including devices for receiving the transmission data in a second section within the auxiliary section, as described above and as recited in amended independent claim 1.

Furthermore, it is respectfully submitted that neither Oguro nor Osakabe, alone or in combination with each other or with Kondo et al., disclose or suggest a transmitting apparatus comprising data input means for obtaining audio/visual data, transmission data generating means for dividing the obtained transmission data into a plurality of items of data each having a predetermined data length, and for generating transmission data of a specific format by placing label data specifying a scheme of each of the plurality of

items of data in a head portion of each of the plurality of items of data, whereby the transmission data generating means also generates auxiliary data having the data length and sets up a section used in transmitting the auxiliary data, and the transmission data generating means places identification data related to spatial placement of the transmission data in a first section within the auxiliary data and places data related to the spatial placement of the transmission data for setting up a system that includes devices for receiving the transmission data in a second section within the auxiliary data, and sending means for sending the transmission data generated by the transmission data generating means to a predetermined bus line, wherein the predetermined bus line supports real-time data transmission for transmitting the audio/visual data and asynchronous data transmission for transmitting control data, as recited in amended independent claim 6.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claims 1 and 6 the claims depending therefrom are patentable over the cited references.

Furthermore, it is respectfully submitted that there is no motivation in the cited references to combine the elements in the manner suggested in the Office Action.

Withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.


Should the Examiner disagree, it is respectfully

requested that the Examiner specify where in the cited document there is a basis for such disagreement.

The Office is hereby authorized to charge any fees which may be required in connection with this amendment and to credit any overpayment to Deposit Account No. 03-3125.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,
COOPER & DUNHAM, LLP


Jay H. Maioli
Reg. No. 27,213

JHM/AVF